

APPROVED	C. G. F. G.
BY	CLASS SUBCLASS
DRAFTSMAN	

Figure 1(A)

5' -AGCCGAGGACGCCGCCGGGAGCCGAGGCTCCGGCCAGCCCCAGCGCGCCAGCT
TCTGCAGATCAGGAGTCAGAACGCTGCACCTTCGCTTCCTCCCAGCCCTGCCTCCTTCTG
CAAAACGGAGCTCAATAGAACTTGGTACTTTTGCCTTTTACTCTGGGAGGAGAGAAGCAG
ACGATGAG|4|GAGAAAATAATGAATGTCAAAGGAAAAGTGATTCTGTCAATGCTGGTTG
M N V K G K V I L S M L V V
TCTCAACTGTCATTGTTGTGTTTTGGGAATATATCCACAG|5|CCCAGAAGGCTCTTTGT
S T V I V V F W E Y I H S P E G S L F
TCTGGATAAACCCATCAAG|6|AAACCCAGAAGTCAGTGGCGGCAGCAGCATTCAAGAGG
W I N P S R N P E V S G G S S I Q K G
GCTGGTGGTTTCCGAGATGGTTTAACAATGG|7|TTACCAAGAAGAAGATGAAGACGTAG
W W F P R W F N N G Y Q E E D E D V D
ACGAAGAAAAGGAACAAAGAAAGGAAGACAAAAGCAAGCTTAAGCTATCGGACTGGTTCA
E E K E Q R K E D K S K L K L S D W F N
ACCCATT|8|TAAACGCCCTGAGGTTGTGACTATGACAGATTGGAAGGCACCCGTGGTGT
P F K R P E V V T M T D W K A P V V W
GGGAAGGCACTTACAACAGAGCCGTCTTAGACGATTACTACGCCAAGCAGAAAATTACCG
E G T Y N R A V L D D Y Y A K Q K I T V
TCGGCCTGACGGTTTTTCGCCGTCGGAA|9|GATACATTGAGCATTACTTGGAGGAGTTCT
G L T V F A V G R Y I E H Y L E E F L
TAACGTCTGCTAATAAGCACTTCATGGTTGGCCACCGAGTCATCTTTTACGTCATGGTGG
T S A N K H F M V G H R V I F Y V M V D
ACGACGTCTCCAGGATGCCTTTGATAGAGCTGGGCCCTCTGCGCTCCTTCAAAGTGTTTG
D V S R M P L I E L G P L R S F K V F E
AGGTCAAGCCTGAGAGGAGGTGGCAGGACGTCAGCATGGTGCGCATGAAGACCATCGGGG
V K P E R R W Q D V S M V R M K T I G E
AGCACATCGTGGCCACATCCAGCGTGAGGTTGACTTCCTCTTCTGCATGGACGTGGACC
H I V A H I Q R E V D F L F C M D V D Q

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Figure 2(B)

sheep	GAAGAAGATGAAGACGTAGACGAAGAAAAGGAACAAAGAAAGGAAGACAAAAGCAAGCTT
bovine	GAAGAAGATGGAGACATAAACGAAGAAAAGGAACAAAGAAACGAAGACGAAAGCAAGCTT

sheep	AAGCTATCGGACTGGTTCAACCCATTTAAACGCCCTGAGGTTGTGACTATGACAGATTGG
bovine	AAGCTATCGGACTGGTTCAACCCATTTAAACGCCCGAGGTTGTGACCATGACGAAGTGG

sheep	AAGGCACCCGTGGTGTGGGAAGGCACTTACAACAGAGCCGTCTTAGACGATTACTACGCC
bovine	AAGGCTCCAGTGGTGTGGGAAGGCACTTACAACAGAGCCGTCTTAGACAATTATTATGCC

sheep	AAGCAGAAAATTACCGTCGGCCTGACGGTTTTCGCCGTCGGAAGATACATTGAGCATTAC
bovine	AAGCAGAAAATTACCGTCGGCCTGACGGTTTTCGCCGTCGGAAGATACATTGAGCATTAC

sheep	TTGGAGGAGTTCTTAACGTCTGCTAATAAGCACTTCATGGTTGGCCACCGAGTCATCTTT
bovine	TTGGAGGAGTTCTTAACGTCTGCTAATAAGCACTTCATGGTTGGCCACCGAGTCATCTTT

sheep	TACGTCATGGTGGACGACGTCTCCAGGATGCCTTTGATAGAGCTGGGCCCTCTGCGCTCC
bovine	TATATCATGGTAGATGATGTCTCCAGGATGCCTTTGATAGAGTTGGGTCTCTGCGCTCC
	** *****
sheep	TTCAAAGTGTTTGAAGTCAAGCCTGAGAGGAGGTGGCAGGACGTGAGCATGGTGCGCATG
bovine	TTCAAAGTGTTTGAAGTCAAGCCTGAGAAGAGGTGGCAGGACATGAGCATGATGCGCATG

sheep	AAGACCATCGGGGAGCACATCGTGGCCACATCCAGCGTGAGGTTGACTTCCTCTTCTGC
bovine	AAGACTATCGGGGAGCACATTGTGGCCACATCCAGCATGAGGTTGACTTCCTTTTCTGC

sheep	ATGGACGTGGACCAGGTCTTCCAAGACGAGTTCGGGGTGGAGACCCTGGGTGAGTCGGTG
bovine	ATGGATGTGGACCAGGTCTTCCAAGACAAGTTGGGGTGGAGACCCTGGGCGAGTCGGTG

sheep	GCCCAGCTACAGGCCTGGTGGTACAAGGCAGATCCCGATGAGTTTACCTACGAGAGGCGC
bovine	GCCCAGCTACAAGCCTGGTGGTACAAGGCAGATCCCAATGACTTCACCTACGAGAGGCGG

sheep	AAGGAGTCTGCAGCATACATTCCCTTCGGCGAAGGGGATTTTTATTACCACGCAGCCATT
bovine	AAGGAGTCTGCAGCATACATTCCCTTCGGCGAAGGGGATTTTTATTACCATGCAGCCATT

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Figure 2(C)

sheep	TTTGGGGGAACACCCACTCAGGTCCTTAACATCACCCAGGAATGCTTCAAAGGAATCCTC
bovine	TTTGGGGGAACACCCACTCAGGTCCTTAACATCACCCAGGAATGCTTCAAAGGAATCCTC

sheep	AAGGACAAGAAAAATGACATAGAAGCCCAATGGCATGATGAGAGCCATCTAAACAAGTAT
bovine	AAGGACAAGAAAAATGACATAGAAGCCCAATGGCATGATGAAAGCCATCTAAACAAGTAT

sheep	TTCCTTCTCAACAAACCCACTAAAATCTTATCCCCGGAATACTGCTGGGATTATCATATA
bovine	TTCCTTCTCAACAAACCTACTAAAATCTTATCCCCGGAATACTGCTGGGATTATCACATA

sheep	GGCCTACCTGCGGATATTAAGCTTGTCAGATGTCTTGGCAGACAAAAGAGTATAATGTG
bovine	GGCCTACCTGCGGATATTAAGCTTGTCAGATGTCTTGGCAGACAAAAGAGTATAATGTG

sheep	GTTAGAAATAACGTCTGA-----
bovine	GTTAGAAATAATGTCTGACTTTGTGCCAGTACATTCTGAATTTGAGAGAGTATTATTCT

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Figure 3

	1		50
bovine	MNVKGVILS MLVVSTVIVV FWEYIHSPEG SLFWINPSRN PEV.GGSSIQ		
sheep	MNVKGVILS MLVVSTVIVV FWEYIHSPEG SLFWINPSRN PEVSGGSSIQ		

	51		100
bovine	KGWWLPRWFN NGYHEEDGDI NEEKEQRNED ESKLKLSDWF NPFKRPEVVT		
sheep	KGWWFPRWFN NGYQEEDEDV DEEKEQRKED KSKLKLSDWF NPFKRPEVVT		
	**** *		
	101		150
bovine	MTKWKAPVVW EGTYNRAVL D NYYAKQKITV GLTVFAVGRY IEHYLEEFLT		
sheep	MTDWKAPVVW EGTYNRAVL D DYYAKQKITV GLTVFAVGRY IEHYLEEFLT		
	** *		
	151		200
bovine	SANKHFMVGH PVIFYIMVDD VSRMPLIELG PLRSFKVFKI KPEKRWQDIS		
sheep	SANKHFMVGH RVIFYVMVDD VSRMPLIELG PLRSFKVFEV KPERRWQDVS		

	201		250
bovine	MMRMKTIGEH IVAHIQHEVD FLFCMDVDQV FQDKFGVETL GESVAQLQAW		
sheep	MVRMKTIGEH IVAHIQREVD FLFCMDVDQV FQDEFGVETL GESVAQLQAW		

	251		300
bovine	WYKADPNDEFT YERRKESAAY IPFGE GDFYY HAAIFGGTPT QVLNITQECF		
sheep	WYKADPDEFT YERRKESAAY IPFGE GDFYY HAAIFGGTPT QVLNITQECF		

	301		350
bovine	KGILKDKKND IEAQWHD ESH LNKYFLLNKP TKILSPEYCW DYHIGLPADI		
sheep	KGILKDKKND IEAQWHD ESH LNKYFLLNKP TKILSPEYCW DYHIGLPADI		

	351	370	
bovine	KLVKMSWQTK EYNVVRNNV*		
sheep	KLVKMSWQTK EYNVVRNNV*		

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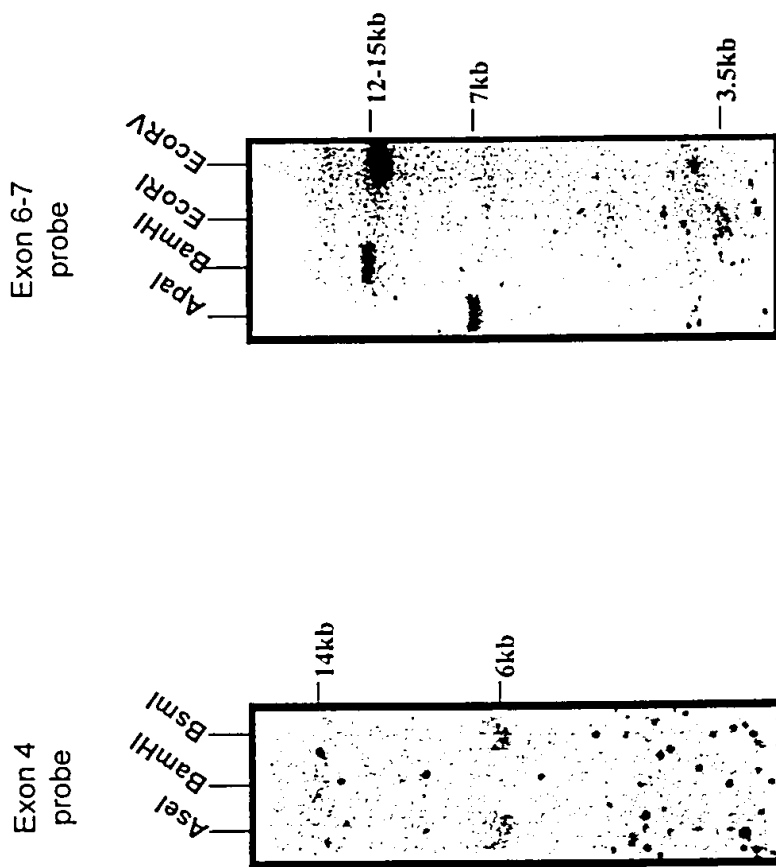
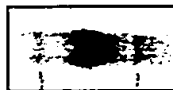


Figure 4

Figure 5

$\alpha(1,3)$ -GT



GapDH



Figure 6

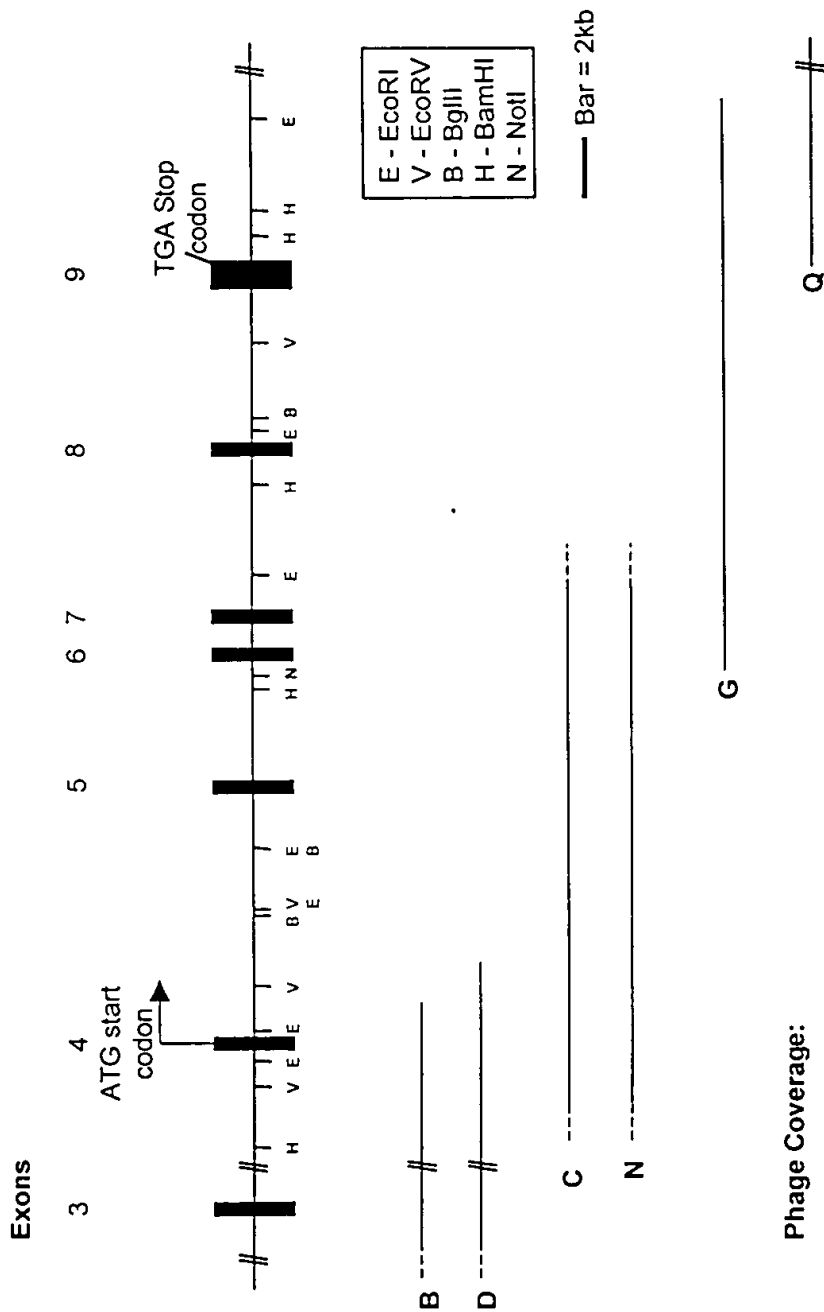


Figure 8

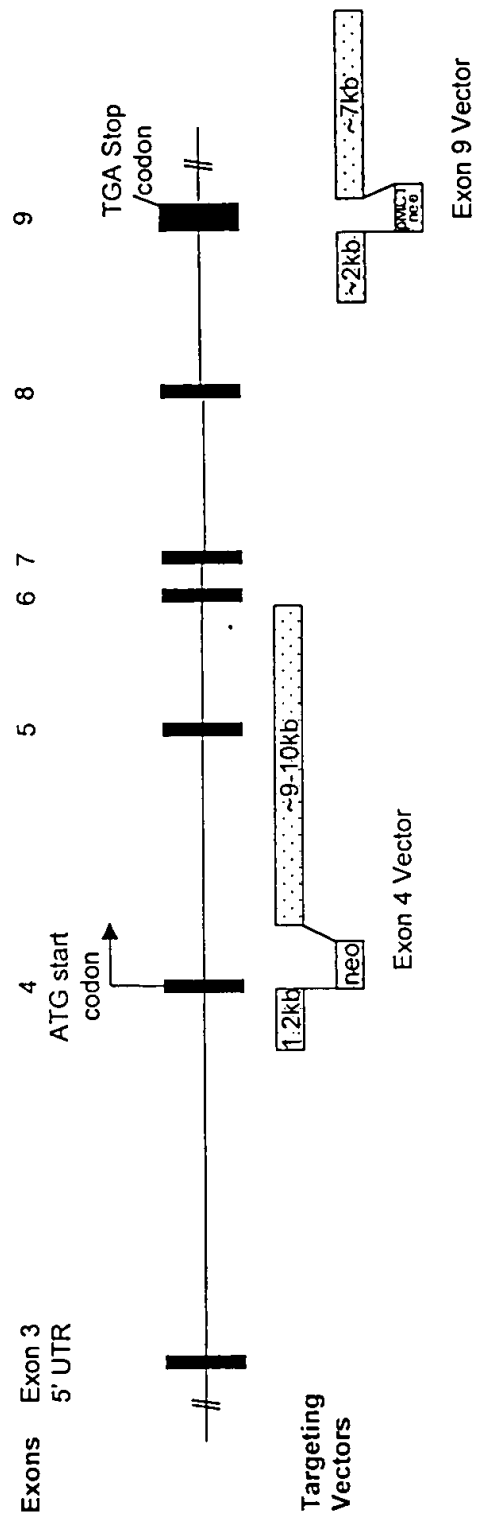


Figure 9

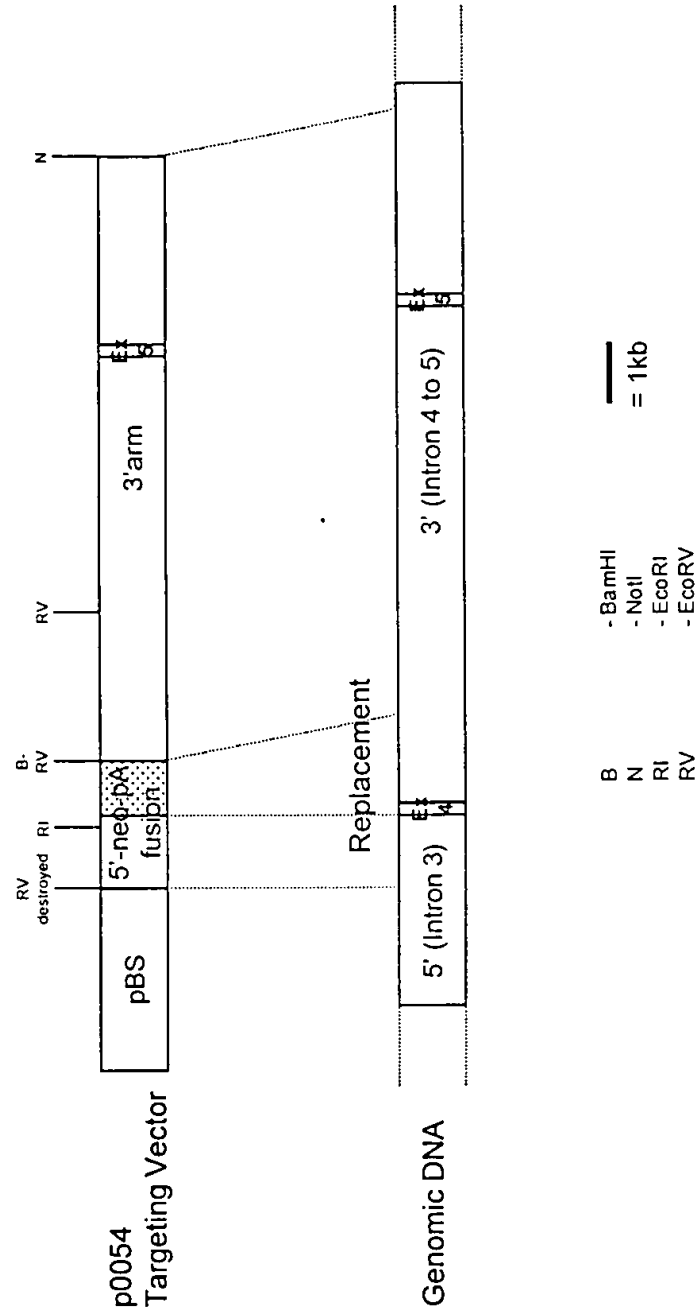


Figure 11

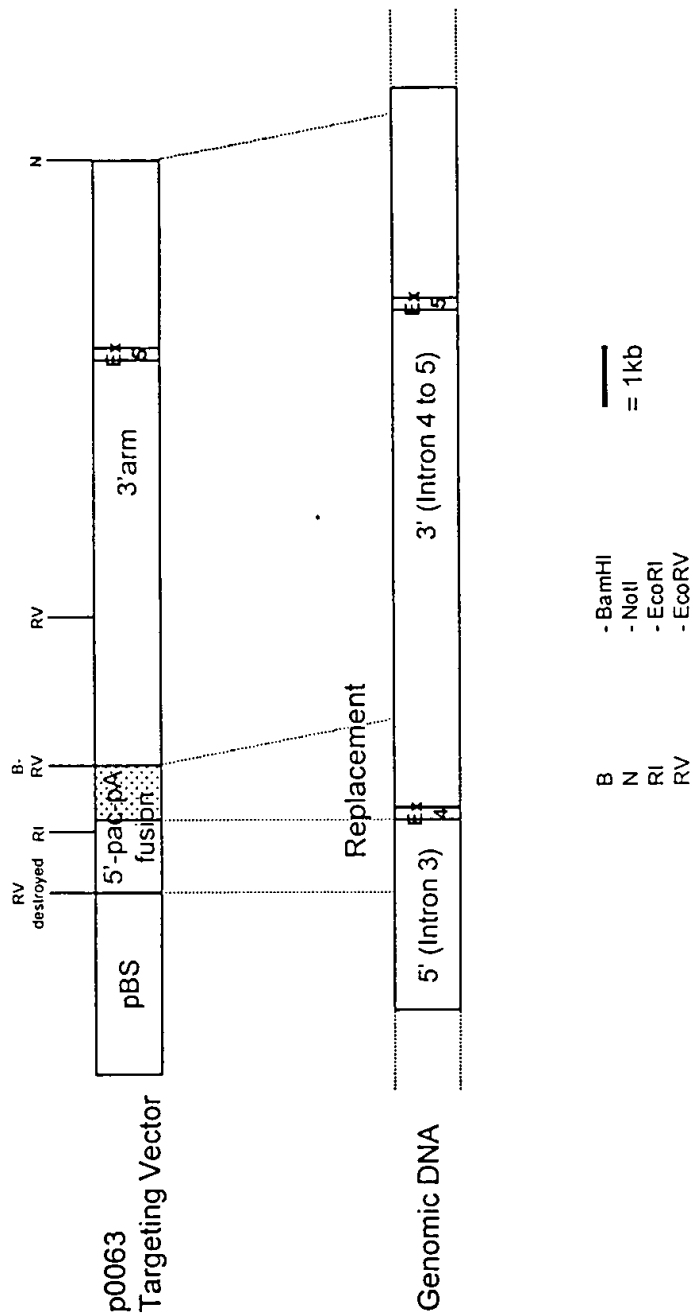
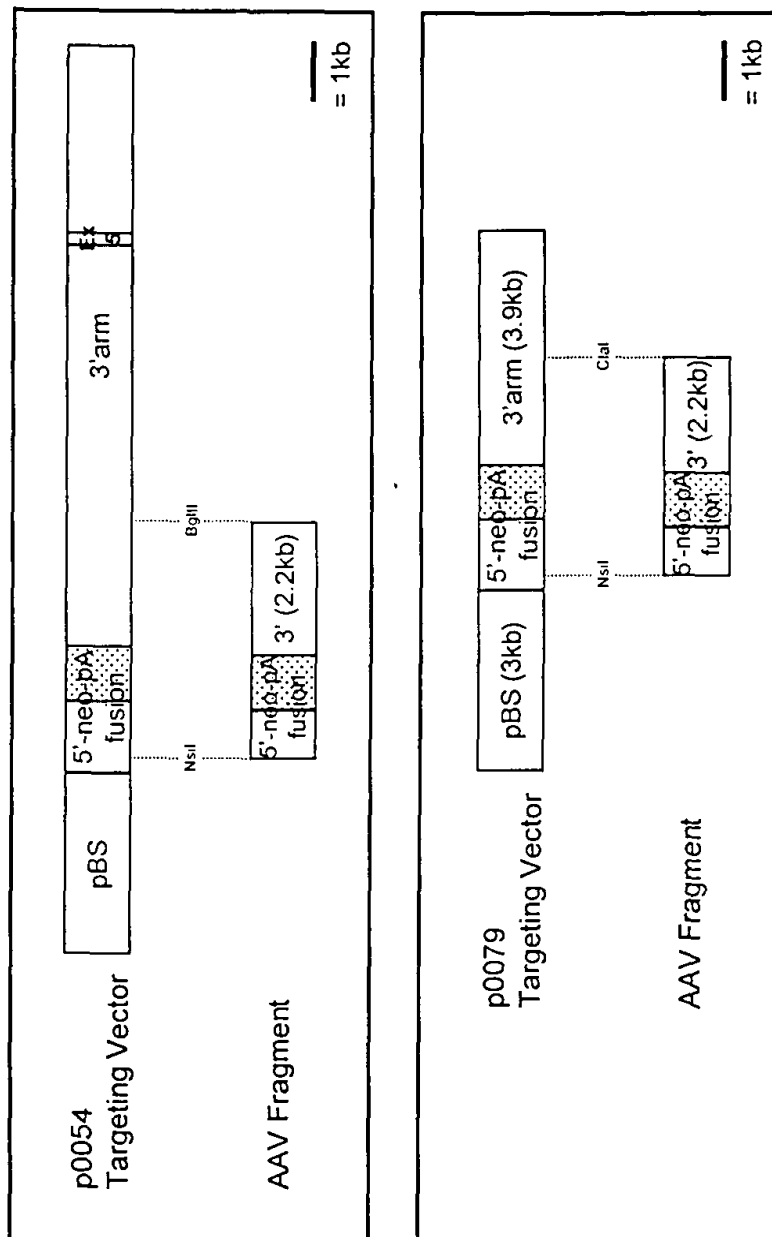


Figure 12



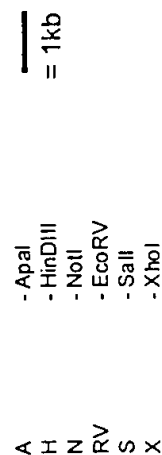
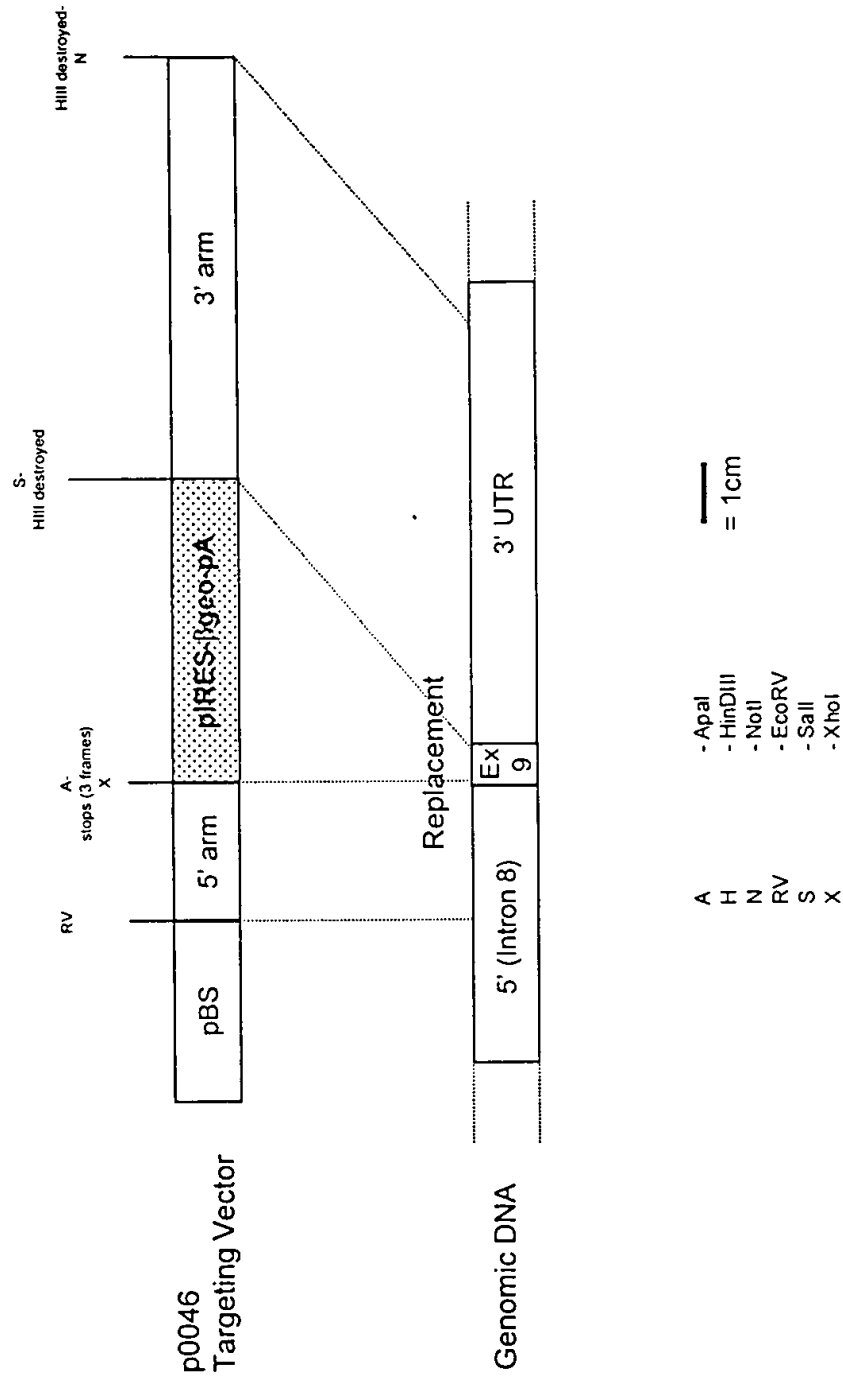


Figure 15



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Figure 16

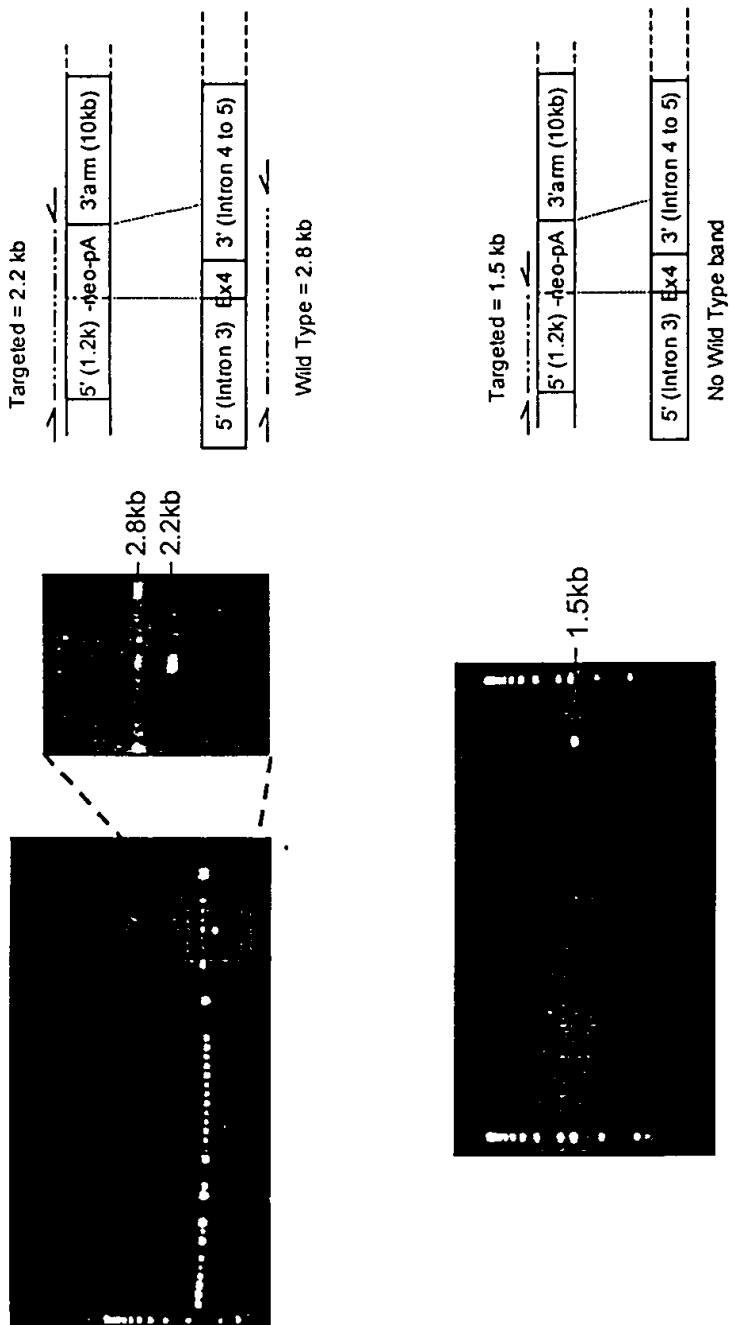


Figure 17

